

DHLC Covid-19 Recovery Plans

Confidential and Proprietary Deborah Heart and Lung Center 6/8/2020

Joint Medical and Administrative Committee

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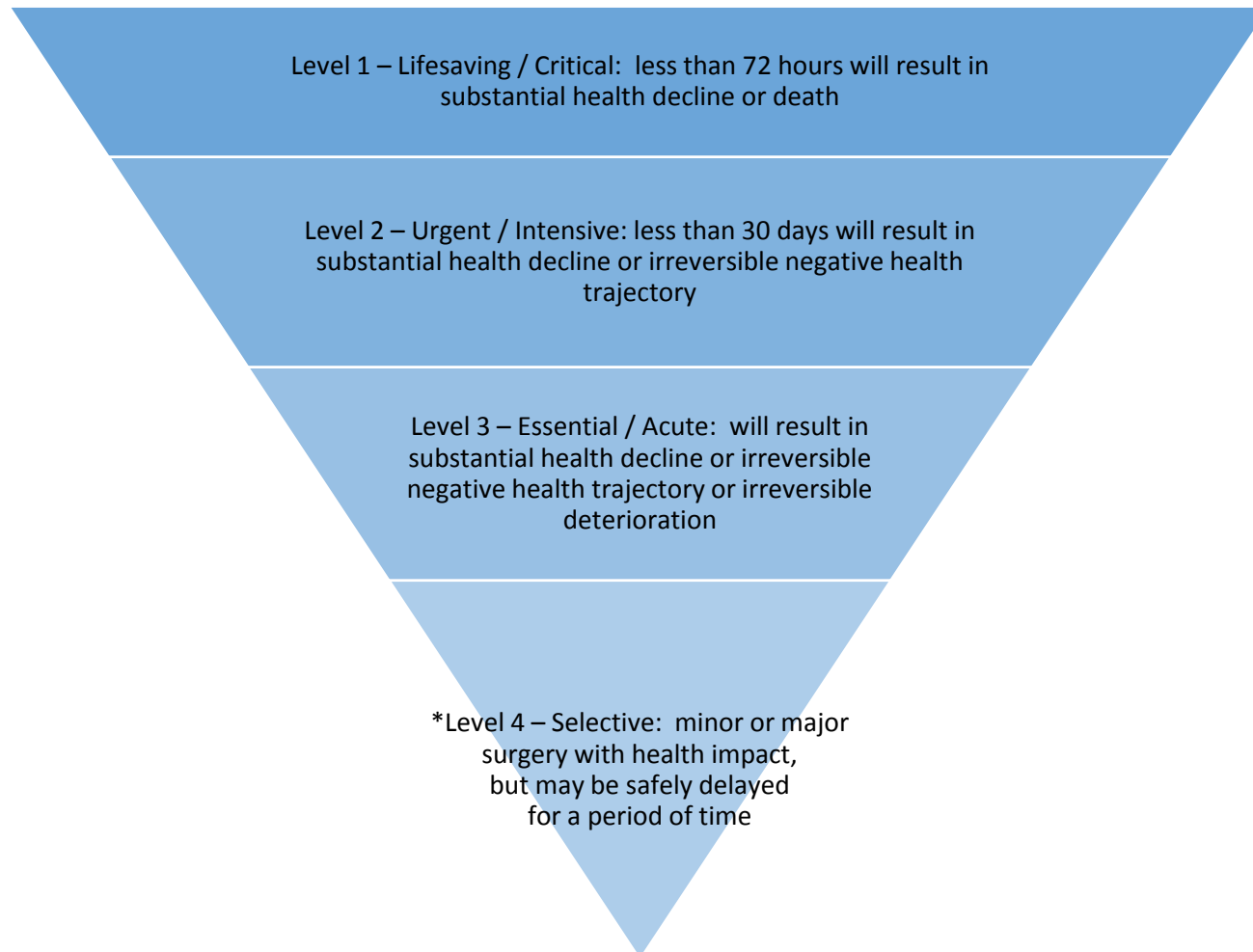
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Procedural Areas

Proposed Standardized Protocols for All Procedural Areas:

1. Process for COVID screening of procedural patients - require mandatory testing of all patients 72 hours before the procedure
Update: 5/26/20: Process for transfer inpatients for Surgical & Procedural patients, if < 24 hours prior to procedure consider patient as an urgent or emergent case therefore, no pre-procedure testing/swabbing is necessary. Utilization of appropriate PPE should always be used.
For inpatients that are here > 24 hours all attempts will be made to obtain testing/swabbing as ordered by a provider at the time of ordering the procedure/surgery. Patients must be placed on Enhanced Droplet Precaution Isolation.
2. Process for bringing in previously Covid positive patients: Patients to be brought in 4+ weeks after positive test and being symptom-free (assuming not urgent or emergent).
Update: 5/26/20: If provider requires two negative tests prior to the procedure, the patient may go to an outside facility of their choice and obtain testing. It will be the provider's responsibility to provide the patient with the two orders; one for outside facility and the second to be performed at DHLC within 72 hours of their scheduled procedure. The provider will also be responsible for obtaining the initial test results.
3. During patient intake, vital signs are taken on all patients before any procedure regardless of location, inclusive of temperature.
4. Continue with patient screening when making reminder calls and asking again during registration process
5. Patients coming in for either a procedure/surgery between the hours of 5am to 6am, will arrive at Lobby Front Desk and the following occurs:
 - Security Guard will contact OPPU Charge person at ext. 4858
 - OPPU personnel will immediately screen patient/accompanied visitor with temperature and questions outside OPPU
 - Screened patient will be directed by OPPU personnel to appropriate area and screened visitor will be directed to Main lobby; allowing 1 visitor to remain in Main Lobby during business hours
6. Continue masking all patients

-
7. All incoming patients from long term care (LTC) facility should be screened and tested since they are high risk, regardless of whether they are having procedure or not even if they were transferred for medical management should protect staff exposure on the floor coming from high risk location (LTC also includes group homes and correctional facilities). Admit to Interventional Unit if not tested at own facility or negative pressure room.
-



*Level 4/Non-essential cases may be delayed in order to preserve PPE if the Center needs to ensure resource availability for patients with Covid-19 and a potential second wave of Covid-19

Department of
Surgery
Operating Room

Plan

- *Scheduling:*
- All cases will be reviewed by the Chair and overseen by system advisory group to ensure consistency and adherence to guidelines
- Cardiothoracic Surgery has maintained a 50 percent volume as most procedures are considered essential.
Any cardiothoracic procedures that were deferred as a result of patient concerns over COVID were provided with a reschedule date to develop a strategy for recovery and ensure patients had a tentative timeline plan for their procedure.

- Vascular Surgery has limited procedural scheduling as defined by the American College of Surgery guidelines. Procedures that required postponement were also provided with a reschedule date starting June 1 and going forward to ensure planning. Higher priority patients will be considered to be moved up to the last two weeks of May if possible.

- Bariatric Surgery has a backlog of 40 procedures that have been rescheduled for current block schedule availability starting May 18th through June. We are looking at the availability of additional surgery slots starting in the second week of May and going forward to alleviate backlog on these procedures.

- Thoracic Surgery currently does not have a backlog of procedures.

- *PATs:*
 - Additional pre- admission test requirement will require patient on campus 72 hours prior for COVID screening with patient education regarding our expectations for them to maintain social distancing, self-quarantining at home before the procedure to ensure their safety in maintaining COVID free status for themselves for their procedure and also to ensure the safety of the staff taking care of them. (Will contact nursing education for the development of a flyer)
 - Old Pediatric Rooms to be the used by IRU for PAT visits.

- *Admissions:*
- All Surgical patients will be admitted to 1st Floor Room 1650-1665 Rehabilitative Services (8-10 beds total)

- *Consents:*
6/1/2020 Update: To be obtained day of procedure in procedural area

- *Recovery:*
- Surgical patients who are admitted will follow normal post-procedure patient throughput to the Surgical Intensive Care Unit
- Same Day Care patients will go to the Recovery Room or floor to be discharged.

- | EP Lab | Plan |
|--------|--|
| | <ul style="list-style-type: none">▪ <i>Scheduling:</i><ul style="list-style-type: none">▪ Following review by Division Director all cases will be reviewed by the Chair and overseen by system advisory group to ensure consistency and adherence to guidelines▪ Continue process of Dr. Corbisiero identifying essential cases (this will allow the team to work through new workflow issues. Dr. Corbisiero to also review backlogged patients (~68) and rank on the priority of scheduling according to guidelines outlined above<ul style="list-style-type: none">○ Week 1: 50% of usual workload (to include non-essentials ranked based on priorities)○ Week 2: 75% of usual workload (to include non-essentials ranked based on priorities)○ Week 3: 100% of usual workload (to include non-essentials ranked based on priorities)▪ <i>PATs:</i> Recommend obtaining 72 hrs. before the appointment in addition to Covid screening; <i>if not enough testing supplies teams should use full Covid protection during procedures as patient will be considered PUI/Positive.</i> Old Pediatric Rooms to be used by IRU for PAT visits.<p>Additional pre- admission test requirement will require patient on campus 72 hours prior for COVID screening with patient education regarding our expectations for them to maintain social distancing, self-quarantining at home before the procedure to ensure their safety in maintaining COVID free status for themselves for their procedure and also to ensure the safety of the staff taking care of them.</p>▪ <i>Admissions:</i> Patients admitted through EMTI
TEE's remain where they are. Nursing would staff the whole area and the remaining beds, so TEE's would not have to move. We would admit and launch EP and EGDs patients into the EP lab directly from that location and depending on the severity of the patient post-procedure we may/could also recover there.
<i>6/1/2020 Update: Utilization of the additional beds on the EMTI unit will be staffed based on patient volume/census and best utilization of financial budget.</i>▪ <i>Consents:</i> To be obtained day of procedure in EMTI▪ <i>Recovery:</i> Recovery Room |

Notes: On Mondays and Thursdays, we have 2 Physicians in the lab. We may need to consider one or all of the following options: Staggering shifts, mandating one provider do non-procedural tasks

Cath Lab

Plan

- *Scheduling:*
- Following review by Division Director all cases will be reviewed by the Chair and overseen by system advisory group to ensure consistency and adherence to guidelines
- Continue process of Dr. Kovach identifying essential cases (this will allow the team to work through new workflow issues). Dr. Kovach to also review backlogged patients (~76) and rank on priority of scheduling according to guidelines outlined above
 - Week 1: 50% of usual workload (9 cases to include non-essentials ranked based on priorities)
 - Week 2: 75% of usual workload (13 cases to include non-essentials ranked based on priorities)
 - Week 3: 100% of usual workload (18 cases to include non-essentials ranked based on priorities)
- *PATs:* Recommend obtaining 72 hrs. before the appointment in addition to Covid screening *if not enough testing supplies teams should use full Covid protection during procedures.* Old Pediatric Rooms to be used by IRU for PAT visits. Additional pre-admission test requirement will require patient on campus 72 hours prior for COVID screening with patient education regarding our expectations for them to maintain social distancing, self-quarantining at home before the procedure to ensure their safety in maintaining COVID free status for themselves for their procedure and also to ensure the safety of the staff taking care of them.
- *Admissions:* 1st three patients to be admitted through CCCU and staffed by CCCU nurses. The following patients admitted through old OPPU (1st Floor Room 1650-1665 Rehabilitative Services) for launch to the Cath Lab.
- *6/1/2020 Update: Consents: To be obtained day of procedure in procedural area*
- *Recovery:* Recovery Room & CCCU
CCCU to be used for surges (including inpatient radial recovery; staffed by Cath Lab RNs)

Structural Heart Cases

- *TAVR: No extra TAVR days until July*
- *Watchman: June 9th only 2 cases*
- *Mitralclip: June 2nd only 1 case*

Auxiliary Physicians:

- *Patel: Limit to 4 cases*
- *VanHise: Limit to 4 cases*
- *Desai: Limit to 2 outpatient cases*
- *Marwaha: limit to 5 cases*
- *Krathen: Limit to 5 cases*

Notes: Once approval from DCA is approved, Lab 1 construction will begin and procedures will be performed in 3 labs. Cath Leadership will need to consider staggering shifts and possibility of Saturdays. The team also needs to consider how this will impact inpatient rooms due to construction; will schedule follow-up meetings to discuss further with appropriate parties.

Clinics ACS

Proposed Standardized Protocols for All ACS Clinics:

1. **Continue screening patients when scheduling appointments**
 - Are you having symptoms of illness (COVID symptoms include: fever, cough, shortness of breath, chills, muscle pain, new loss of taste or smell, vomiting or diarrhea, and/or sore throat)
 - Have you been tested for COVID-19
 - Have you been in contact with some that is sick or has tested + for COVID-19

All patients that enter should be asymptomatic. Any patient that answers a question with a potential concern call the clinic charge nurse or direct the patient to their car until we have the information to the provider.
2. **Continue masking all patients**
3. **Continue limiting visitors unless absolutely mandatory**
4. **During patient intake, vital signs are taken on all patients before any appointment, inclusive of temperature.**
5. **Process for bringing in previously Covid positive patients: Patients to be brought in 4+ weeks after positive test and being symptom-free (assuming not urgent or emergent)**
6. **If PUI or known positive, patient to go to negative-pressured Bronch suite in ACS.**
7. **If possible, facilitate virtual registration and consent through the Portal**
 - If it does not work the patients will be registered prior to their arrival to the center. We will still need to obtain signatures but this will be post Covid screening at the door, the registrars are behind plexiglass and we have already been obtaining consents.
 - The team will obtain plexiglass protection to be provided to the front desk unit coordinator
8. **Rearranged the chairs in the waiting room and believe we meet the social distancing guide and can seat 50 patients. This should be sufficient if we continue to only allow patients in.**
9. **The MOB is also now an option to see patients if we need it.**

Pulmonary

Plan

- Continue with Telehealth process of providers reviewing their schedules weekly
 - New Provider (Pulmonologist) for ramp-up in the clinic
 - Pulmonary procedures following Covid testing guidelines at DHLC
 - PFT lab staff ramped up based on volume
 - Sleep lab nights ramped up based on volume
 - Cardio-Pulmonary Rehab and Physical Therapy (**MOB**) ramped up based on volume and slots available
-

- Surgery**
- Plan
- **Process will continue for Telemedicine as listed below to include: department of surgery staff to speak with patient to determine telephone or equipment availability for video conference. Modification of current practice should include changes in current dialogue with patients to include safety mechanisms in place in the clinic to ensure patient and provider safety in our clinics on campus.**
 - **Any patient with concerns over current condition should be brought in for a face to face visit with physician.**

- Cardiology**
- Plan
- Continue with Telehealth process of providers reviewing their schedules weekly
 - In efforts to reduce the number of individuals in the clinic, Cardiology Leadership will work with Division Directors in identifying opportunities to adjust clinics to Telehealth only appointments (for example Tuesdays and Thursdays)
 - Follow MedAxiom guidelines to support Clinic vs. Telehealth (Screenshot below)



- Triage**
- Plan
- Continue to require patients to schedule appointments
 - Hospitalists/Clinical Cardiology APPs will cover and work with Consult/Cards 2 Physician

Ancillary Services

Proposed Standardized Protocols for All Ancillary Services:

- 1. Process for bringing in previously Covid positive patients: Patients to be brought in 4+ weeks after positive test and being symptom-free (assuming not urgent or emergent)**

Imaging

Plan

- Work with PAS to increase volume, already implemented to fill vacant openings – no ramp-up process, fill all available slots, if possible, May 18th on.
- Instructed PAS same day scheduling of multiple imaging studies may not be possible to optimize the use of available time slots, patients may need to come multiple days for testing.
- Programs with needs related to imaging should be providing that patient list to PAS to prioritize scheduling of those patients a.s.a.p.
Delaying this distribution until close to the 18th may delay their program procedures. With three weeks advance notice and slow program ramp-up over the next three to four weeks after we should not expect a large demand for immediate overbooking of imaging studies post-May 18th. Overbooking should be a last resort, if there are critical needs for patients these studies should be performed within the next three weeks.
- Voluntary overtime by Echo sonographers will be offered if volume dictates the necessity – overtime slots would be scheduled and booked as needed.

Laboratory

Plan

- The molecular dept. has been training additional techs to perform SARS-CoV-2 testing to expand testing to 2nd shift (3p-830p M-F).
- Provide testing for SARS-CoV-2 on day and evening shifts Mon-Fri (maximum 4 runs/day). This would allow a maximum of 96 tests/ weekday if full runs of 24 samples are performed. On weekends/holidays 1 run/day set up will be between 10-11 am.
- Respiratory panels will soon be provided in-house (target date 5/11/20) which will offer molecular testing for 16 additional organisms which may be the cause of respiratory symptoms. Test TAT is approx. 3.5 hours. Viral panels must be approved by Dr. AbouJaoude &/or Dr. Schloo. Determining whether testing will be run only after negative SARS-CoV-2 results obtained or in conjunction with SARS-CoV-2 tests.
- Evaluating COVID19 antibody testing platforms to provide testing for employees & patients (within certain patient populations). Not intended to become the screening center for the public at this time.
- Evaluating addition SARS-CoV-2 tests platforms (e.g. POC)
- In the process of revising our schedule to get a COVID testing run set up between 7:30-8:30 Mon-Fri to accommodate the 10 am surgeries.
- Mon-Fri we are looking into setting up our first run somewhere around 07:00. This takes approx. 1 hour. The run, depending upon size takes about 1.5-2.5 hours. This would allow for us to have results for 2nd case ORs as we discussed briefly discussed last week, though it would be best to test all OR patients as PATs to ensure results are available prior to

OR. Practically speaking, we could begin setting up another run around 12-1pm and then set a run up in the late afternoon if needed.

- We **can** run just one test by itself; however, it would still take about 1.5 hours to run just one test. We can also add tests while the machine is running; however, there is a very limited window where we can do so without negating our entire run. For this reason, we try not to add anything to the instrument while it is in the middle of a run. We will **NOT** stop a run to add a test; this would require setting everything up again and wasting valuable reagents & tech time.
- The limiting factor remains sample collection swabs and transport media. Investigating other supply sources/assistance from other facilities in conjunction with our Purchasing Dept.
- *Covid screening for Procedural Patients*
 - Patients having a surgery or procedure scheduled that will be performed in any of our procedural areas or operating rooms; will be tested for COVID-19 beforehand. For such patients, testing will be done 24-72 hrs before their procedure between the hours of 7 to 11 am. A drive-through area will be available the lower level of the parking garage. Signage will be visible.
 - Patients will be registered and consented for testing.
 - Once COVID-19 testing is resulted, the patient will get a call from a clinical team member of the results and a whether to proceed with the appointment. A second call will outline all details will include time and location.
 - If patient received COVID-19 testing at an outside facility within 72 hours of their procedure and tested negative they can provide written documentation the day of the procedure.
 - If patient is diagnosed with COVID-19, or have a positive test results the procedure/surgery will be cancelled. Only an urgent or emergency procedure will be performed due to increased health risks. This includes testing from outside facilities.
- Blood work Location
 - Testing only patients will have blood work drawn in the Laboratory
 - Clinic patients requiring blood work will have it drawn in the ACS exam room

Environmental Services

- Dedicated medical equipment should be used when caring for patients with known or suspected COVID-19.
 - All non-dedicated, non-disposable medical equipment used for patient care should be cleaned and disinfected according to manufacturer's instructions and facility policies.
- Ensure that environmental cleaning and disinfection procedures are followed consistently and correctly.
- Routine cleaning and disinfection procedures (e.g., using cleaners and water to pre-clean surfaces prior to applying an EPA-registered, hospital-grade disinfectant to frequently touched surfaces or objects for appropriate contact times as indicated on the product's label) are appropriate for SARS-CoV-2 in healthcare settings, including those patient-care areas in which aerosol generating procedures are performed.
- Management of laundry, food service utensils, and medical waste should also be performed in accordance with routine procedures

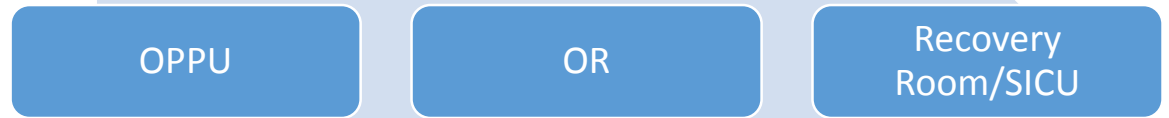
Inpatient Services Proposed Standardized Protocols for Inpatient Services:

1. All incoming patients from long term care facilities (LTC) facilities should be considered high risk and should be tested regardless of requirement for procedure or medical management in an effort to protect staff exposure on floor if patient is coming from high risk location. (LTC should also include group homes and correctional facilities).
2. If PUI or known positive, patient to go to negative-pressured inpatient rooms.
3. Beginning May 18th to begin Comprehensive Inpatient Services focusing on 5 teams in addition to managing ICU and Covid patients. (Table below shows the teams).
4. Should occupancy exceed single room availability will need to cohort patients.

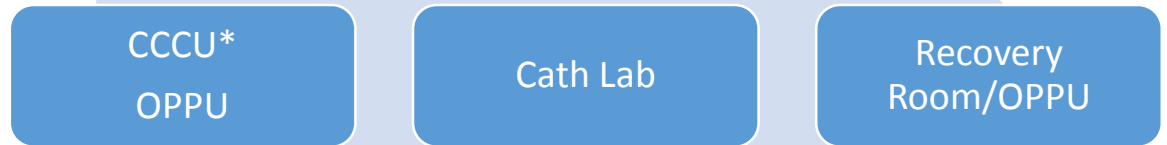
Teams/ Services	Cards 1: Interventional Cardiology	Cards 2: Clinical Cardiology	EPS	Hospital Medicine	MICU
	Attending (weekly rotation) APP (weekly rotation) Fellow Hospitalist Case Manager	Attending (weekly rotation) <u>Inpatient Service Doc of Day/Week (every other week)</u> APP: Fellow Hospitalist Case Manager	Attendings APP Fellow Hospitalist Case Manager	Attendings APP Case Manager	Attending Fellow

Patient Flow for
Procedural
Patients

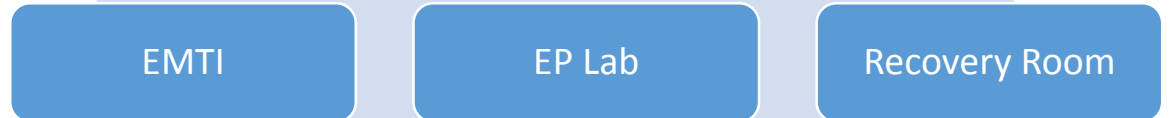
Surgery Patients



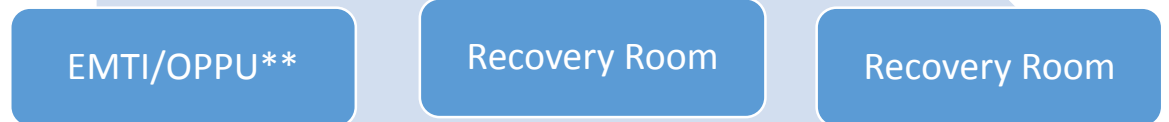
Cath Lab Patients



EPS Lab Patients



Pulmonary Procedure Patients

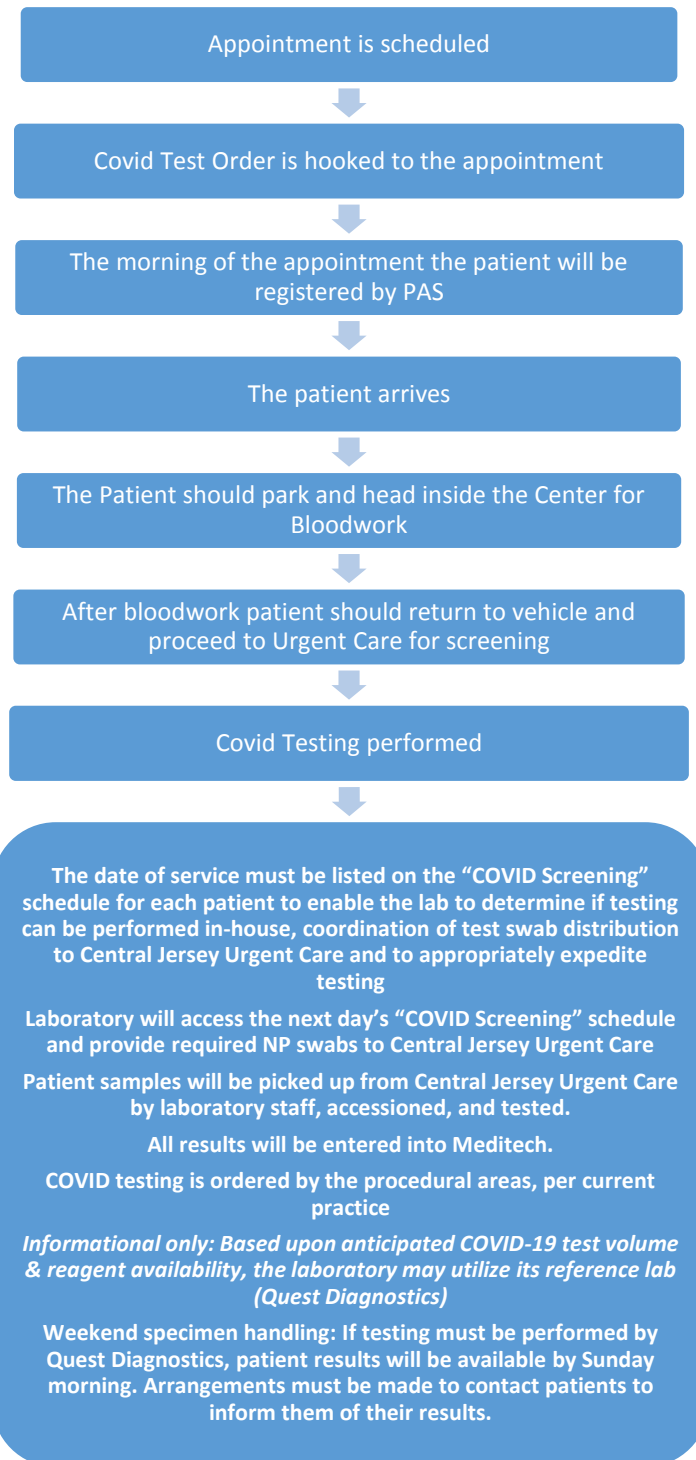


*First 3 patients

**Based on occupancy

DHLC Covid-19 Recovery Plans

Patient Flow for Covid Testing & non-PATs Outpatient Procedural Patients
(EPS Lab, Cath Lab, and Pulmonary Procedure)



DHLC Covid-19 Recovery Plans

Covid screening for Outpatient Procedural Patients

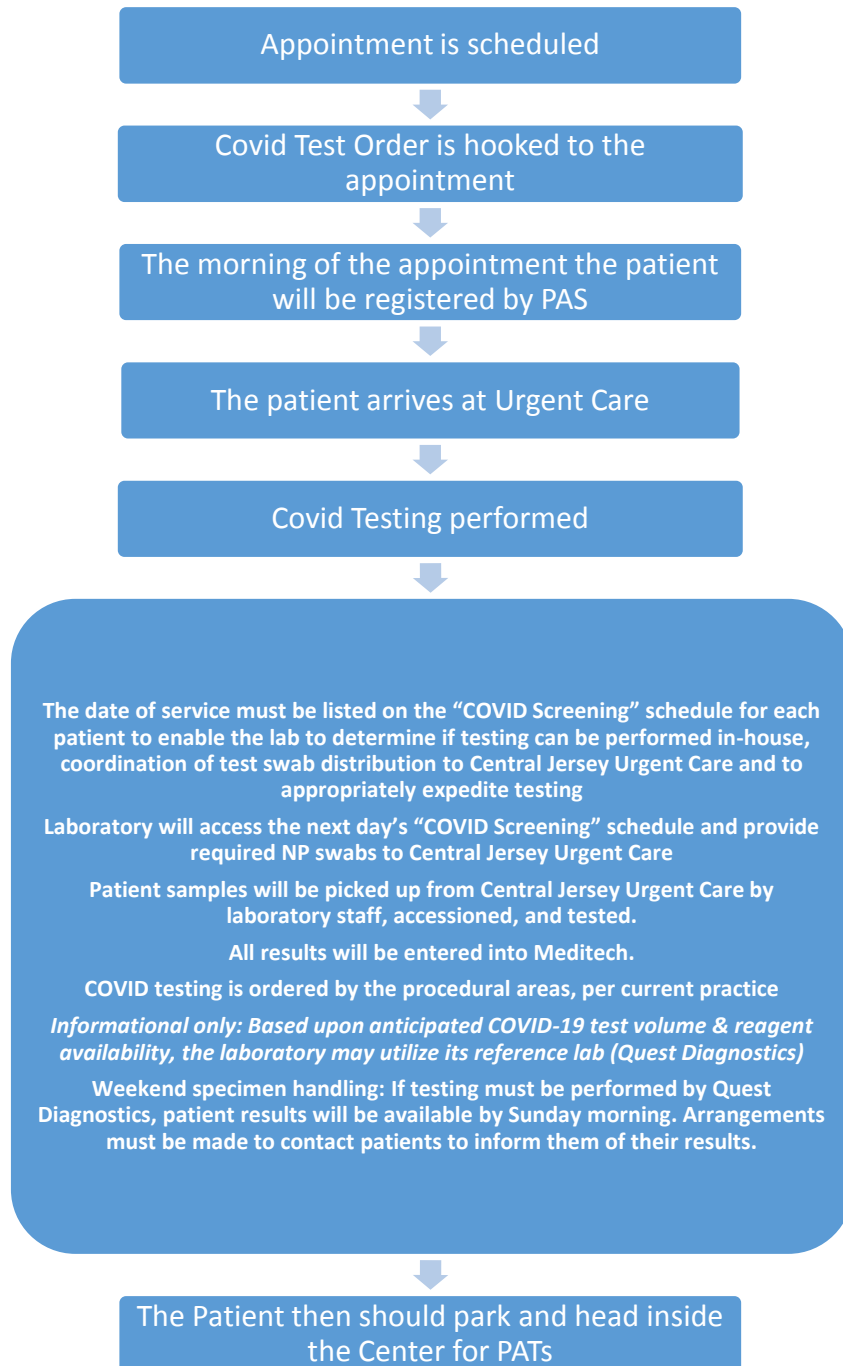
Patients having a surgery or procedure scheduled that will be performed in any of our procedural areas or operating rooms; will be tested for COVID-19 beforehand.

6/5 Update: For such patients, testing will be done 48-96 hrs before their procedure. Swabbing will start at 8am to 1200pm, however arrangements can be made for later appointment if applicable and notification to Terri Wallowitch ext 4267 is needed.

In addition, Terri will be sending a daily cumulative list of patients who are requiring swabbing. Saturday/Sunday Urgent Care is open from 9am-6pm if needed.

- It is also imperative for the Schedulers to place the date of the procedure/surgery when scheduling the swabbing.
- Once COVID-19 testing is resulted, the patient will get a call from a provider of the results and a whether to proceed with the appointment. A second call will outline all details will include time and location.
 - If patient received COVID-19 testing at an outside facility within 72 hours of their procedure and tested negative they can provide written documentation the day of the procedure.
 - If patient is diagnosed with COVID-19, or have a positive test results the procedure/surgery will be cancelled. Only an urgent or emergency procedure will be performed due to increased health risks. This includes testing from outside facilities.
- After-hours: Patients can call 609-893-6611 and ask to speak with the On-Call fellow.

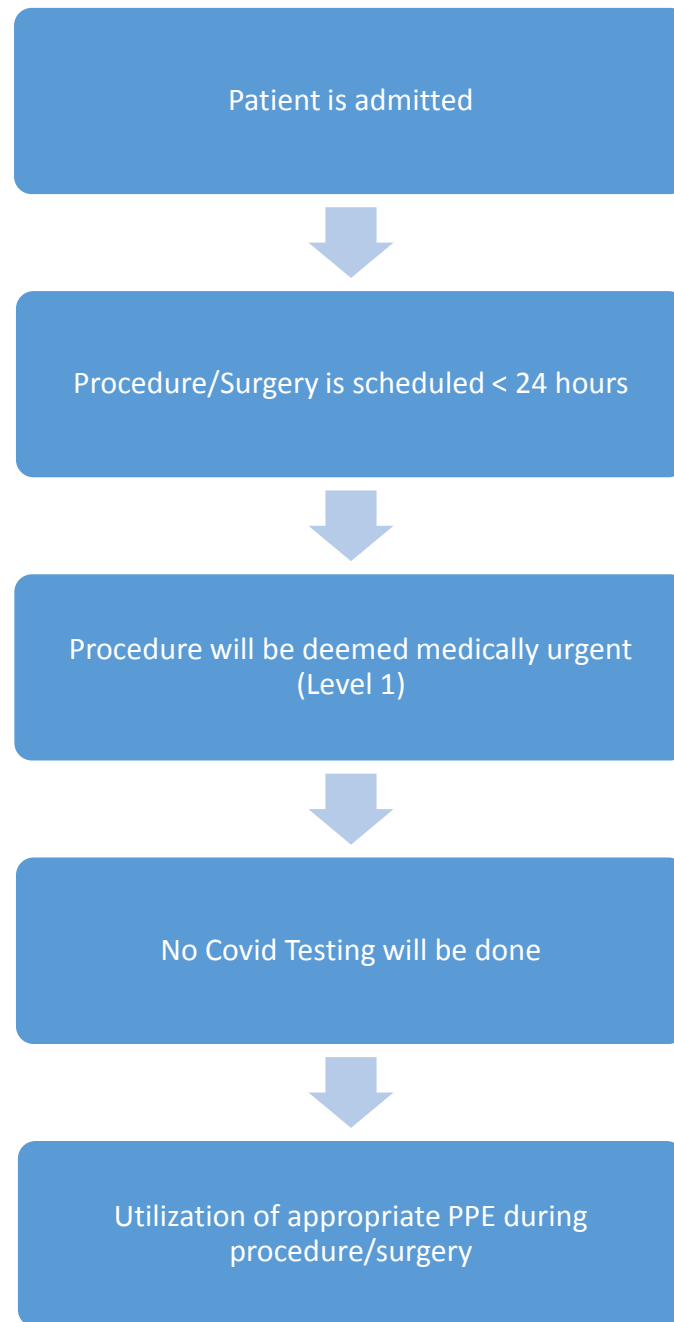
Patient Flow for Covid Testing & PATs
Outpatient Procedural Patients
(Surgery Patients)



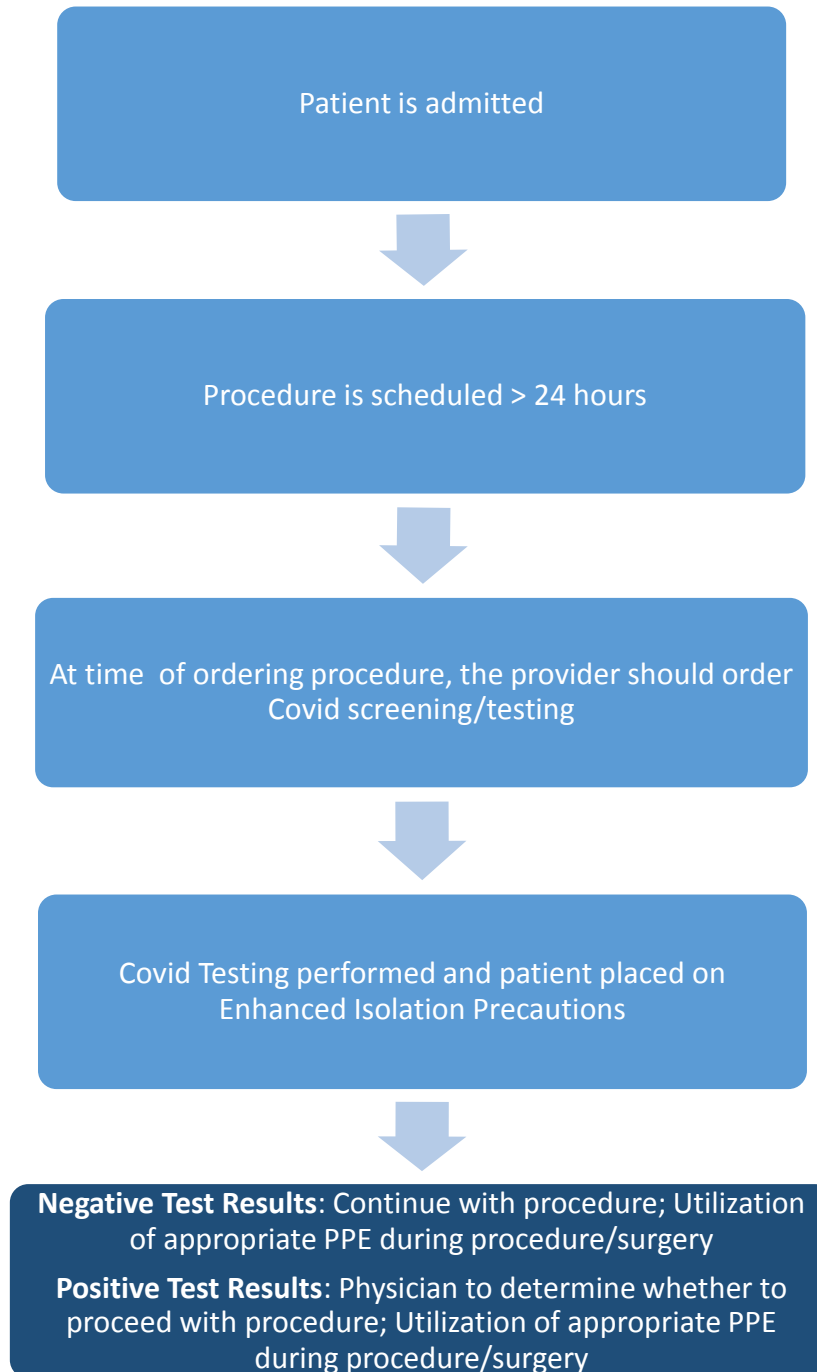
Covid screening for Outpatient Procedural Patients

- Patients having a surgery or procedure scheduled that will be performed in any of our procedural areas or operating rooms; will be tested for COVID-19 beforehand.
6/5 Update: For such patients, testing will be done 48-96 hrs before their procedure. Swabbing will start at 8am to 1200pm, however arrangements can be made for later appointment if applicable and notification to Terri Wallowitch ext 4267 is needed.
- Once COVID-19 testing is resulted, the patient will get a call from a provider of the results and a whether to proceed with the appointment. A second call will outline all details will include time and location.
 - If patient received COVID-19 testing at an outside facility within 72 hours of their procedure and tested negative they can provide written documentation the day of the procedure.
 - If patient is diagnosed with COVID-19, or have a positive test results the procedure/surgery will be cancelled. Only an urgent or emergency procedure will be performed due to increased health risks. This includes testing from outside facilities.
- After-hours: Patients can call 609-893-6611 and ask to speak with the On-Call fellow.

Patient Flow for Covid Testing &
Inpatient Procedural Patients <
24 Hrs.



Patient Flow for Covid Testing & Inpatient Procedural Patients > 24 Hrs.



Hospital "Re-Start" Bed Configuration

<u>Floor</u>	<u>Current Number of Usable Licensed Beds</u>	<u>Proposed Number of Usable Beds</u>	<u>Add / (Subtract) Beds</u>	<u>Comments</u>
MICU	10	12	2	Closed rooms remain open under current CMS waivers for Covid-19
SICU	10	12	2	Closed rooms remain open under current CMS waivers for Covid-19
3-Main	24	12	-12	Convert all to single
3-Lesser	14	14	0	Covid unit
4-Lesser	27	15	-12	Convert all to single
4-Main	<u>0</u>	<u>12</u>	<u>12</u>	IRU to Med /Surg beds under current CMS waivers for Covid-19
Total	85	77	-8	
Recovery Room	<u>0</u>	<u>15</u>	<u>15</u>	To be used for Covid patients who require intensive care if and only if the two MICU isolation rooms are occupied and 3-Lesser is not capable of handling that level of care May also only use Room 5 (iso room in RR) for Covid patient while using remainder for non-covid patients.
Total	85	92	7	
<u>Intake and Recovery:</u>				
Functionality of 4-Main (IRU) will move to the old OPPU / Pulmonary Rehab space on the first floor (Room A147), as well as to the CCCU on the fifth floor, and the EMTI on the second floor.				
SDC and Observation patients will recover in these areas as well, if not in a licensed bed.				
May also use the Recovery Room if not being used for intensive care Covid patients				

5/21/20 Update: Testing Schedule for Cath Lab and EPS Procedure

Day of COVID and Lab Tests	Day of Procedure
Monday	Tuesday and Wednesday
Tuesday	Thursday
Wednesday	Friday
Thursday	None- but can used for Friday cases if needed
Friday	Monday
Friday	Tuesday; if hospital is <u>closed Monday</u> for a holiday
Monday or Wednesday	Thursday; if hospital is <u>closed on Tuesday</u>
Tuesday or Thursday	Friday; if hospital is <u>closed on Wednesday</u>
Thursday	Monday; if hospital is <u>closed on Friday</u>